

A refractory dielectric may be combined with the spinel, the amt. of spinel being at least 51 wt. % pref. dielectrics are SiO<sub>2</sub>, MgO, Al<sub>2</sub>O<sub>3</sub>, kaolin, pyrophyllite, bentonite and talc. A pref. spinel contains about 28 wt. % MgO and 72 wt. % Al<sub>2</sub>O<sub>3</sub> or MgO and Al<sub>2</sub>O<sub>3</sub> in a mol ratio of 1:1.

USE/ADVANTAGE - With e.g. a cable or thermocouple sensor having a centre conductor, sheath and ceramic insulation (claimed). Spinel component provides high resistance, to high temp. and pressure, hard neutron radiation, and corrosive environments.

CHOSEN-DRAWING: Dwg.1/3

TITLE-TERMS:

CERAMIC INSULATE MINERAL INSULATE ELECTRIC COMPONENT COMPRISE  
SPINEL MAGNESIUM  
ALUMINATE OPTION COMBINATION REFRACTORY DIELECTRIC

DERWENT-CLASS: K08 L02 L03 S03 X12

EPI-CODES: S03-B01A; X12-D03D; X12-D07B; X12-E01A;

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1993-044671

Non-CPI Secondary Accession Numbers: N1993-077027

DERWENT-ACC-NO: 1993-101242  
DERWENT-WEEK: 199312  
COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Ceramic insulation for use in a mineral insulated  
electrical component  
- comprises spinel esp. magnesium aluminate opt. combined with a  
refractory  
dielectric

INVENTOR: CANNON, C P; KOCH, W J

PATENT-ASSIGNEE: AMERICAN TECHNOLOGY INC[AMTEN]

PRIORITY-DATA: 1992US-0911164 (July 9, 1992) , 1991US-0756610  
(September 9,  
1991)

PATENT-FAMILY:

PUB-NO	MAIN-IPC	PUB-DATE	LANGUAGE	
WO 9305520 A1	H01B 003/12	March 18, 1993	E	029
AU 9225822 A	H01B 003/12	April 5, 1993	N/A	000

DESIGNATED-STATES: AT AU BB BG BR CA CH CS DE DK ES FI GB HU JP  
KP KR LK LU MG M  
N MW NL NO PL RO RU SD SE AT BE CH DE DK ES FR GB GR IE IT LU MC  
NL OA SE

CITED-DOCUMENTS: DE 839664; JP60214295 ; US 4200077 ; WO 9014671

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
WO 9305520A1	N/A	1992WO-US07456
September 1, 1992		
AU 9225822A	N/A	1992AU-0025822
September 1, 1992		
AU 9225822A	Based on	WO 9305520
N/A		

INT-CL (IPC): G01K007/02; G21C017/00 ; H01B003/12 ;  
H01B013/06

ABSTRACTED-PUB-NO: WO 9305520A

BASIC-ABSTRACT: Ceramic insulation comprises a spinel.

L Number	Hits	Search Text	DB	Time stamp
-	261843	mineral	USPAT; US-PGPUB; EPO; JPO; DERWENT	2001/11/27 12:56
-	47758	kaolin	USPAT; US-PGPUB; EPO; JPO; DERWENT	2001/11/27 12:56
-	20192	mineral and kaolin	USPAT; US-PGPUB; EPO; JPO; DERWENT	2001/11/27 12:56
-	614245	cable	USPAT; US-PGPUB; EPO; JPO; DERWENT	2001/11/27 12:56
-	273	(mineral and kaolin) and cable	USPAT; US-PGPUB; EPO; JPO; DERWENT	2001/11/27 15:30